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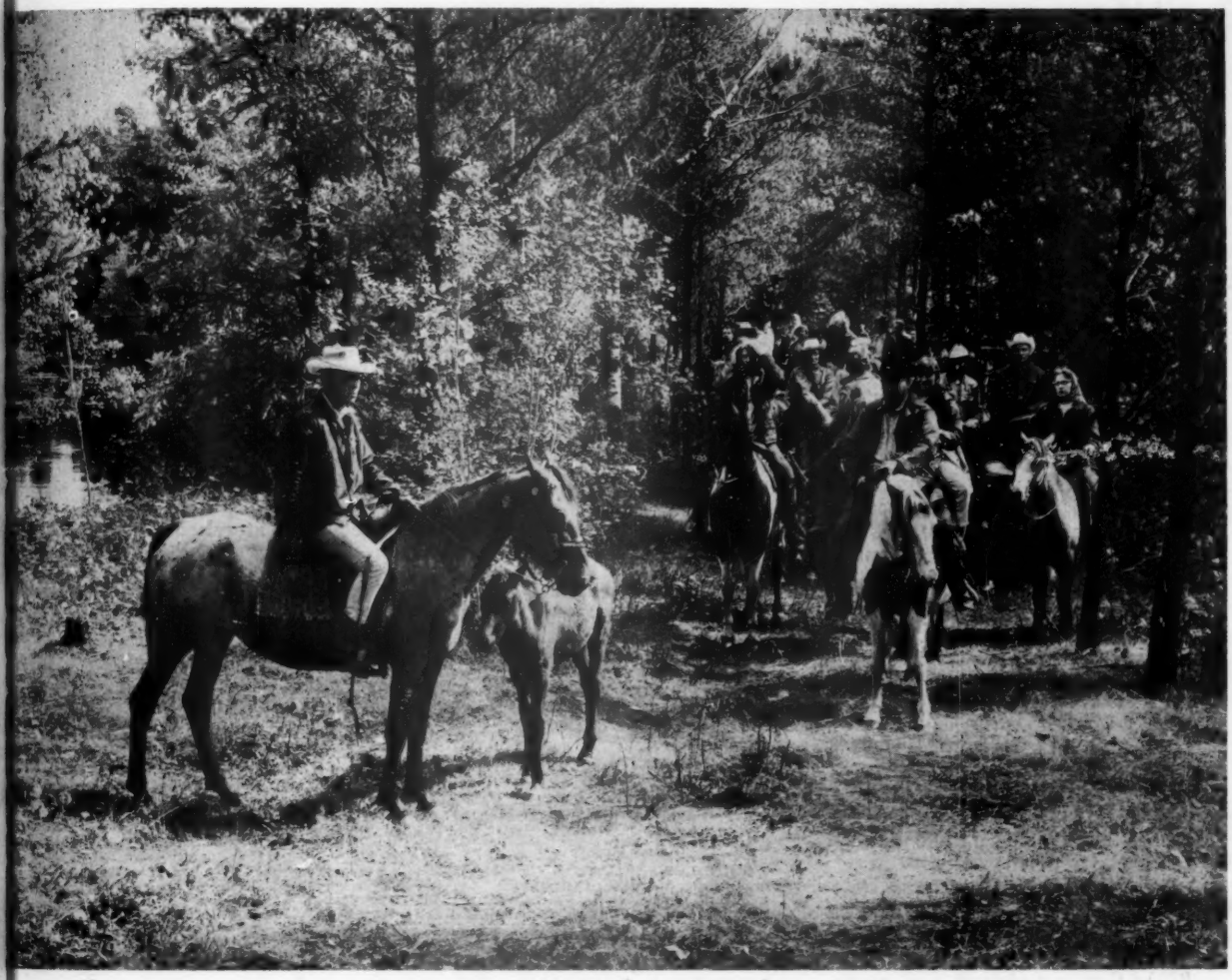
JULY 1966
VOL. 31 NO. 12

Soil Conservation

DEVOTED TO THE WISE USE OF LAND AND WATER RESOURCES



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SOIL CONSERVATION SERVICE

U. S. DEPARTMENT OF AGRICULTURE

RC&D Payoff . . .

The 10 original RC&D projects now have a couple of years of experience behind them.

What do they have to show for their efforts?

We asked our Resource Development people to give our readers a report on *what has been accomplished*—not what was planned—in some of them.

It was natural to turn first to the West Central Minnesota Project, launched in 1964 with such favorable attention to the Crow Wing Canoe Trail (described in *Soil Conservation*, January 1965).

RD fieldman "Lennie" Losh tells (p. 267) how the canoe trail idea has been enlarged to include land activities and, with a cluster of other project measures, boosted local income by $136,000 in 1965.

We will have progress reports from other projects in the months ahead.

Wagons Ho: A similar idea, but developed by individual initiative, is the Wagons Ho recreation enterprise operated by a Kansas rancher.

SCS State Biologist Jack Walstrom and WUC Howard Cheney responded (p. 275) to our query about how an enterprising conservation district cooperator has turned local historical and natural resources to profit.

Pan American Congress: Delegates returning from the First Pan American Soil Conservation Congress bring encouraging word (p. 283) that provisions are made, through a permanent commission, to continue an activity so well begun.

COVER: Members of a saddle club come down to a landing where the Crow Wing Wilderness Saddle Trail joins its counterpart, the canoe trail, in the Wadena Soil Conservation District, Minn. It is part of the RC&D project described in our lead article.

Soil Conservation

Devoted to the wise use of land and water resources

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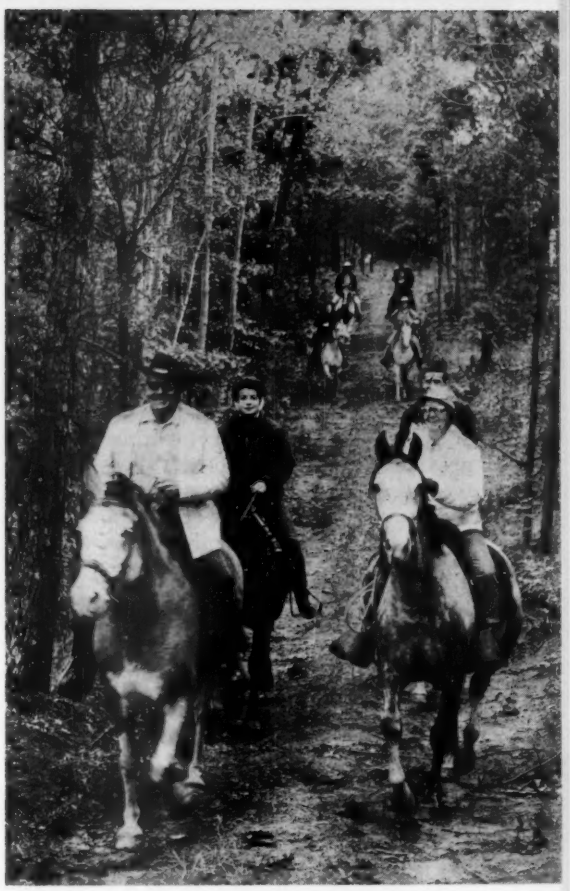
Crow Wing Revisited

Wilderness saddle trail brings influx of visitors and adds new jobs and dollars to Minnesota's growing RC&D project



By Linus B. Losh
Resource Development Specialist, SCS, Lincoln, Nebr.

CROW WING Canoe Trail started Minnesota's first resource conservation and development project with a splash 2 years ago.

The first of some 80 "project measures" planned to enliven the economy of a 5-county area, the vacation waterway played host to more than 2,000 canoeists in its first summer, bringing new business to outfitters, grocers, filling stations, and other businesses serving visitors.

How well has Crow Wing lived up to its early promise? What of the other measures so hopefully planned to bring new dollars into the area by developing its waters, woods, wildlife, and other resources?

More than 5,000 canoe enthusiasts explored the Crow Wing River in 1965, and the number is expected to increase again this year.

A new Crow Wing Wilderness Saddle Trail winds 30 miles along old logging roads through the pines, permitting riders to share some of the same campsites used by canoeists. Already, it vies with the canoe trail in popularity.

A way to do it

The original 80 project measures have now grown to 120—every one a dream that local people had nourished for years without an effective way to make it real. Now all are underway or being actively planned.

The measures already in operation provided about 40 man-years of employment and increased local income $136,000 in 1965. It is estimated that by 1970 they will be adding 80 man-years of employment and nearly a million dollars of gross income annually. As additional project measures are activated, new job opportunities and income to the area will be realized.

"Once the ball gets rolling, it keeps getting bigger and bigger," says John R. Rife, Wadena County conservationist and community leader in the West Central Minnesota RC&D Project.

The project area—Swift, Pope, Kandiyohi, Wadena, and Otter Tail counties—totals about 3.5 million acres, about 90 percent of it privately owned. It is 1 of 10 original pilot RC&D projects started in 1964.

Sponsors are the five soil and water conservation districts and the boards of commissioners of the five counties. Each district has its own committee which approves proposals and sets priorities before they are submitted to the project sponsors for action.

Establishment of the Crow Wing

Wilderness Saddle Trail, like its predecessor the canoe trail, illustrates how local people and government agencies work together to put natural resources and human talents to work.

Planning together

More than a year ago the Gateway Riders Saddle Club of Menahga and John Rife met and discussed the idea of a saddle trail to complement the canoe trail. They studied aerial photographs provided by the Soil Conservation Service.

State forestry officials and SCS Work Unit Conservationist Don Benrud provided technical help in planning and laying out the trail and corral locations. They considered carefully the erosion hazards, proximity to campsites, topography, types of vegetation, and needs for tree and brush removal. Selections were made with an eye to retaining the panoramic splendor and beauty of the rivers and forests.

Community leaders Frank Green, Menahga druggist who forsook the Twin Cities for country living, and Hugo Pulju, local motel and restaurant owner, are two of the many who spearheaded local developments. The latter was instrumental in securing, at no cost, easements from all of the private landowners. The Minnesota Power and Light Company and the Northwest Paper Company cooperated in providing rights-of-way.

Easement forms and property owner maps were prepared by a Wadena attorney, free of charge.

Boy Scouts earned conservation merit badges by removing brush and doing general cleanup work on the trail and at camping sites.

The Minnesota Department of Conservation supervised 30 locally employed Neighborhood Youth Corps (NYC) boys in clearing the trail of brush, trimming trees, building corrals, and enlarging four of the camping areas used originally by canoeists.

The boys were paid almost $13,000 in wages from funds obtained through the Economic Opportunity Act. The earnings provided pocket money, paid for cars, and went into college savings. More important was the opportunity to learn to work, to enjoy outdoor activities, and to be of service to the community.

At the same time an estimated $3,000 was spent in the area for supervision, transportation, working tools, chemicals, and other supplies. The developed trail is now valued at $60,000.

One of the first groups to utilize the new facility was the 40-member New London, Minn., riding club, from 200 miles away. The North Central Saddle Club association held its annual ride on the new trail last September. More than 150 riders camped, stayed at nearby motels, and in other ways utilized products and services in the area for a weekend. This and similar groups have donated funds for upkeep to the local riding club.

How does this activity affect the well-being of Wadena County and nearby communities? Already facts and figures are coming to light.

Huntersville grocer Earl Anderson sold groceries and supplies to

Campfire activities were a part of the Crow Wing Wilderness Saddle Trail dedication. The action-packed weekend included a 2-day trail ride, overnight campout, and square dance.

Youngsters as well as adults share the excitement of activity about the headquarters corral of the saddle trail near the village of Huntersville.

the trail riders, including enough locally grown hay to bolster his income $30 a day for the 3-day weekend.

One Menahga restaurant catered to the Saddle Club and netted $344 in food sales. Total food purchased locally was about $600.

Twenty of the riders rented horses from local and nearby riding stables at $4.50 a day. Veteran canoe outfitters rented camping equipment to the group at $4 a day.

Wadena County businessmen estimate that nearly $2,000 was spent in the area by this one group, exclusive of gasoline, oil, and other auto supplies.

Based on local expenditures of only $10 a user the potential benefits from this facility is $25,000 yearly. Nearby grassland farmers have a new market for hay and pasture. Horse rental enterprises will need to expand. The increasing number of horses in the county provides a growing tax base with property tax at $5 a head.

In adjacent Otter Tail County, Mr. and Mrs. Marvin Moll and their two sons have developed a small but thriving farm enterprise serving the tourist trade. They raise and sell strawberries to vacationers attracted by fish-laden Otter Tail Lake. Last year they netted more than $2,560, providing summer employment and college expense money for the two sons.

Two high school girls and one boy "lived in" to handle the berry sorting and earned about $300.

For harvesting help, a total of 20 young pickers were paid about $1,500 in wages. Gasoline dealers benefited from hauling the boys 20 to 30 miles to and from work.

A sideline enterprise by the Moll sons is the balling of conifer trees for sale. They purchase about 25 seedlings yearly, grow and prepare them, then sell them at the farm. In recent years, when the boys are away at school, hired help has been used to carry on the sideline.

Such resource developments in agriculture complement the tourist trade, create jobs, and provide a broader tax base. Chamber of Commerce and other studies show that a dollar produced locally multiples three to four times in community benefits.

At the opposite corner of the project, in Swift County-Appleton area, is a well-established sugar beet enterprise. Forty to forty-five growers produce 72,000 tons of beets annually, having a gross value in excess of $1 million.

More new jobs

As many as 200 families move in during summer and early fall to work in the beet fields. They earn $300,000 in wages, much of which is spent locally for groceries, supplies, and other necessities.

During harvest, fleets of trucks haul the beets to the Appleton railroad collecting yard. More than 100 trucks are owned by the growers, and local drivers are hired for a 3-week period at $1.50 an hour. Community-generated income from this trucking force is estimated at $30,000. In addition, five men are kept busy at the collection point weighing, unloading, and piling the beets.

The Milwaukee Railroad Company, under contract with the Crystal Sugar Company, makes 3 trips a week for a 30-day period hauling more than 100 carloads a trip to the refinery at Chaska.

At Benson, Minn., a new alfalfa dehydrating plant will be in production this year, creating a new market for 3,500 acres of alfalfa.

The Benson Chamber of Commerce and civic leaders were successful in raising $60,000 locally through the sale of debenture bonds at $500 each to farmers and townspeople. Then, they obtained a Small Business Administration loan of $230,000.

Construction of the plant results in community income from property sales, materials and supplies, labor, and machine hire. Added real estate tax income of $7,500 is anticipated.

During the peak season the plant will employ 16 to 20 persons; 4 will have permanent jobs.

These and other activities illustrate how resource conservation, development, and utilization contribute to the economic well-being of rural America. ♦

Watershed Dams Bring Solution to Stubborn Gully Problem

TO GET excess water safely off the farm, you first provide a stable outlet at the farm boundary. Verl Adams and his conservation-minded neighbors have known this all along.

But they still had to wait 10 years to take this important first step.

Now, thanks to their Crooked Creek Watershed Project, they can put in all the grassed waterways they need on their own farms and know they'll stay put.

Verl, who lives near Anita in Cass County, Iowa, was one of the landowners with a particularly bad situation. A road-eating gully caused by surface water from a large drainage area plus regular flow overland from a broken tile line was a hazard to both the Adams farm and a county road.

Verl shaped the gully 10 years ago to spread the water out and reduce gouging. In the succeeding years he and neighbors Paul Bebensee and Pete Kelloway installed 6 miles of terraces, three stockwater ponds, and 10 acres of grassed waterways on their farms.

It was a losing battle for Verl, though, as any lateral channels he attempted to put in grass would gradually unravel from the bottom. The gully became larger and more of an eyesore with each passing year. Road maintenance was costly, too.

The coming of the Crooked Creek Watershed Project was the solution for this problem and others similar to it. In addition to pooling the efforts of many farm landowners, the project brought in the Cass County board of supervisors, Rural Electric Cooperative, and others with some interest in protection from water damage or better use of rainfall in the watershed.

The Soil Conservation Service planned a structure for the Verl Adams farm, 1 of 28 to be installed with Federal money. The board of supervisors removed an old wooden bridge and replaced it with a crushed rock crossing.

The concrete structure, which is 10 feet high, provides a good tile outlet and a firm, stable outlet for the grassed waterway at the farm boundary.

Harlan Gettens, Cass County supervisor, believes the improvement will save the county several hundred dollars annually and perhaps even save a life. He pointed out the opportunity to widen and reshape the road and beautify the area which, he said, means a lot to the county administrators.

As for Verl Adams, he believes in eternal vigilance. "It looks like we have the gully whipped," he said, "but I'm still going to keep an eye on her."

Once an earthmoving contractor himself, he views Nature's powers of wind and water erosion "with respect" and advises others to do the same.—DON FREVERT, *Civil Engineer, SCS, Audubon, Iowa.* ♦

An active roadside gully (above) running beside Verl Adams' barn is stabilized by the structure installed as a part of the Crooked Creek Watershed Project.

After the flood . . .

Many Work Together to Mend Damaged Illinois Farmland

By Hampton H. Long
Area Conservationist, SCS, Macomb, Ill.

WHEN the Mississippi broke through the levees last spring near Quincy, Ill., it took quick work and cooperation by many to restore the heavily damaged agricultural land.

On April 17, floodwaters raced through levee breaks and covered 24,000 acres in the Adams County Soil and Water Conservation District. The water was 2 to 12 feet deep.

When the water finally receded in May, the area was a scene of desolation—buildings severely damaged or completely gone; scour holes everywhere; drainage ditches completely filled in; and 5 inches to 5 feet of sand covering $500-an-acre farmland. Damage to 181 farm homes, roads, fences, and crops amounted to $3 million.

USDA agencies in action

Representatives of the Agricultural Stabilization and Conservation Service, Soil Conservation Service, Cooperative Extension Service, and the Adams District met immediately to map out plans for the large job ahead in the distressed area. They traveled throughout the area to survey the damage and needs for repair and treatment.

SCS made arrangements for technical assistance, ASCS for the needed emergency practices and cost-sharing funds, Extension Service for publicity on the emergency program and advice on cleanup and sanitation, and the Adams District for help in coordination and determining priorities.

Assistance was offered on ditch cleanout, cropland restoration, farm levee repair, and debris removal. The response was heavy—and quick. Nearly 160 requests for help were turned over to the SCS office at Quincy. Work Unit Conservationist Giles Carr and Conservation Technicians Lowell Schwada and Steve Yates got started immediately.

The first step was to map all areas covered with sand. Soil borings were made by Les Bushue, area soil scientist, and Carr drew a precise map of each area. The map showed the size of the area, the sand depths, and the original soil composition.

Flood-strewn debris lay everywhere (below) and most fields were covered by a thick layer of sand (top).

Each map was studied to determine how best to move the sand, how far, and how much. Carr also had to determine if the original soil was such that sand could be added to it, and how much in each location.

Moving the sand

Three main procedures were developed to deal with the sand:

Areas with more than 3 feet of deposits were considered a total loss, since it was not economically feasible to move the sand.

In areas covered 1 to 3 feet deep and where the haul would be short, bulldozers were used to move the sand to scour holes, old depressions, or to unaffected parts of the field. This operation left from 10 to 12 inches of sand to be incorporated into the soil.

A large 5-foot moldboard plow pulled by two tractors and set to plow 32 to 36 inches deep was used to turn the sand under. As the plow moved along slowly, most of the sand slid down the furrow and was covered to a depth of 2½ to 3 feet.

In other areas where the sand cover was shallow, a land leveler was used to spread the deposit in an even layer about 4 inches deep. This was then plowed under with a 6-bottom plow set to plow about 12 to 14 inches deep, providing a good mix of the sand with the original soil.

Large plow is used to turn sand under, mixing it with the original soil. Work Unit Conservationist Giles Carr is at right.

In many cases, the sand actually improved the internal drainage of the soil.

All together, Carr and his staff were responsible for the technical phases of restoring about 500 acres of damaged bottom land to its original value.

Ditches cleaned

In addition, they surveyed and supervised the cleaning out of 27 miles of farm drainage ditches. In some cases, the ditches had completely disappeared. Draglines were used in removing most of the silt and sand.

The U. S. Army Corps of Engineers repaired the main levees and now is raising them 3 to 4 feet to provide more protection.

Another flood of this size may be a long way off; but when it comes, agencies and district leaders will be ready to step in and work together to get agriculture back on its feet. ♦

Plowed field will regain its former productivity, making farming possible again on the flood-ravaged land.

USDA Offices Aid Sale of Recreation Permits

Field offices of three USDA agencies are helping promote sales of the new $7 Federal Recreational Permit.

The permit—a wallet-size card this year instead of a bumper sticker—will admit a carload of visitors to any of more than 7,000 Federal recreation areas across the Nation. Purchasers also can use the permit when entering an area by bus or on foot.

Forest Service and Agricultural Stabilization and Conservation Service offices have the permits for sale. SCS offices have information about the permits and where to get them. ♦

Sugarcane to recreation . . .

Planning Makes Louisiana Course a Champ in Golf and Land Use

By John M. Cross
Assistant to State Conservationist, SCS, Alexandria, La.

OF THE MILLION people in the metropolitan area of New Orleans, thousands like to play golf. There are five private and three municipal golf courses in the city, plus four more in the fringe area. But you still have to wait your turn to tee off.

That's why a sugarcane field was transformed into one of the newest additions to golfing, and one of the best. How it became one of the best is where the story lies.

Riverlands Golf and Country Club paid Gulf States Land and Industries one whole dollar for 54 acres to establish the original nine holes, at a site one-half mile off Airline Highway (U.S. 90) and 30 miles from downtown New Orleans. Gulf States had acquired the land from Godchaux Sugar Company, which had used it to grow sugarcane.

A map and a plan

The first step in sound and proper conversion of cropland to another use was the development of a soil and water conservation plan based on a soil survey of the area and interpretations of this survey. As a cooperator with the Crescent Soil and Water Conservation District, the club received soil survey information and help in developing a conservation plan and in applying practices called for in the plan.

One of the 700 golfers who visit Riverlands each week tees off on the new recreation facility.

The land had a drainage system installed—for sugarcane. But you don't play golf across split ditches and quarter drains. That's what led directors at Riverlands to the Crescent District. Stafford Thibodeaux, SCS work unit conservationist assisting the district, is a golfer himself. He figures that proper drainage, whether for golf or sugarcane or any other use, is essential.

The first thing Thibodeaux and his crew did was take a look at the soils map. It helped them locate possible sites for greens and tees, indicated which soils would need draining, and where the pattern of soil differences would help in locating such things as rest areas, practice areas, and shelters.

Thibodeaux' fluency in both golf and conservation enabled him

John Schneider and Stafford Thibodeaux inspect a thick cover of Tifton 328 bermudagrass on one of the greens at Riverlands.

to suggest a course layout combining proper use of soils and drainage patterns with good fairway direction and length and green and tee location.

Every fairway at Riverlands is pointing down a "crown"—a low ridge with flat ditches along the side. The crown empties into laterals, also shallow and flat, to lead the water away into drainage mains off the course. The ditches are designed with 7½ to 1 side slopes to allow play from anywhere on them.

Greens were located on the highest spots so they would not interfere with the drainage pattern.

Grass and trees

The Crescent District furnished the club enough Tufcote bermudagrass to plant a nursery plot, from which sod was taken to cover the tees. The club bought Tifton 328 bermudagrass to sod each green and seeded every fairway to common bermudagrass.

The club bought pine trees from the Louisiana Forestry Commission, other species from local nurseries, and set rows between each fairway and in odd areas. Besides adding functional beauty, the grasses and trees serve to control erosion.

Riverlands qualifies as a championship course, attesting to the care taken in its design and layout.

The club bought another 73 acres of sugarcane land and now has 18 holes. On the latter half Thibodeaux designed a small lake to fit into the course. Soil from the lakesite was taken to build the greens and tees, leaving a thing of beauty and a bad trap if you happen to hook or slice a drive.

The old plantation tenant house on the back nine is now the temporary clubhouse. A new one, located to conform to the drainage and fairway pattern, shows in the conservation plan as a future development.

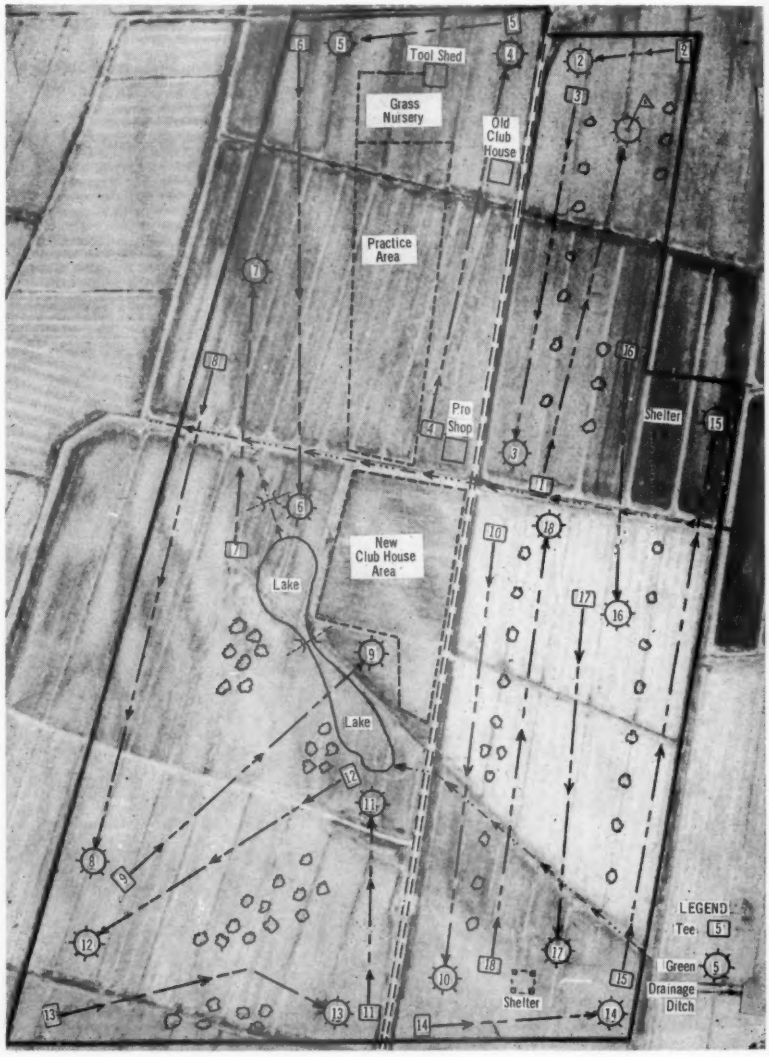
Cropland diverted

Diversion of 123 acres of cropland into recreation and the application of conservation practices to fit the need are not the whole story of New Orleans golfing, however.

Conservation pays—on the farm or the golf course. Out at Riverlands, which has reached its maximum membership in just 4 years, 700 people each week see the footprints of conservation. More than 4,000 each week play the city park courses, as many as 1,500 on a weekend.

Some private clubs in New Orleans charge $1,200 initiation fee, $67 a month, and $5 green fee. Even at these prices, the pressure for golfing room may get worse on the sugarcane field.

"They can play our course within 30 minutes after a rain," says John Schneider, golf pro at Riverlands. "The quality of the course as a whole would not have been as good if we hadn't given attention to drainage, soils, and planning." ♦



Layout of the 127-acre Riverlands Golf and Country Club course superimposed over the former canefields.

Wagons on the Prairie

Kansas farm couple revive old Butterfield wagon-train days for recreation profit

By Jack W. Walstrom and Howard V. Cheney
Biologist and Work Unit Conservationist, SCS, Salina and Gove, Kans.

THE CRY of "Wagons Ho" once again echoes across the western Kansas plains as covered wagons move out along the old Butterfield Trail.

"Wagons Ho" is a new income-producing recreation project for Frank and Ruth Hefner of Quinter, Kans.

On the trail

Guests of the Hefners spend several days and nights on the trail, enjoying many varied activities and the quiet beauty of the Kansas prairie.

Potential pioneers usually arrive at a selected campsite the evening before the trip begins. They get to know one another, and the Hefners explain the activities to come. The next morning, it's "Wagons Ho!" And the wagon train starts its journey down the Butterfield Trail.

A typical day's schedule: Eating a hearty breakfast on the open prairie; riding in a covered wagon, Concord stage, or on a saddle horse; fording a shallow section of the Smoky Hill River; searching for fossils or rocks in prime hunting areas; viewing occasional cattle herds; being entertained around an evening campfire; and resting beneath a western sky. And somewhere along the way an Indian raid and a visit by a Pony Express rider are sure things.

Good food, and plenty of it, are of course a vital part of the Hefners' western hospitality.

The Hefners, cooperators with the Gove County Soil Conservation District, completed a Great Plains Conservation Program contract on their 2,560-acre farm in 1964. Under the plan, 230,000 feet of terraces and 2 acres of windbreaks were installed, and 83 acres of cropland was converted to grass. With the major conservation work done, they turned their attention

Visitor's view of the wagon train rolling beween the Bollinger and Owens farms on the Butterfield Trail.

From the end gate of a covered wagon, this "trail rider" watches the wide Kansas prairie meet the horizon.

to recreation.

An interesting aspect of this 20th Century wagon train is the cooperation the Hefners receive from the many people involved.

Howard Cheney, SCS work unit conservationist, helped determine the original route of the Butterfield Trail, still visible on aerial photographs. He made a list of landowners whose permission would be needed to cross their lands.

Fifty-five landowners and tenants gave the Hefners permission not only to cross their lands but also to use likely areas for campsites and stopping places. Many landowners have become so enthusiastic that they pitch in and help, providing skilled wagon drivers and horsemen for the tour.

The wagon train includes 13 covered wagons, 25 horses and mules, and a stagecoach. The stagecoach, built from the original plans of the Concord Coach Company, has no springs. Concord used strips of leather to cradle the body and absorb bumps. The stagecoach wheels also are authentic, made specially in Arkansas by Mennonite craftsmen. Passengers trade places at each rest stop so that everyone has an opportunity to ride in the Butterfield coach.

As the caravan moves along, drivers and cowboys point out scenes of interest—a homesteader's long-abandoned sod house; the ruts of the Texas cattle trail trampled into the sod by millions of longhorns in the 1870's; and the original stage stations along the Butterfield Trail. Also of interest to the Easterner and all city folk are some of the signs of modern farming—fields reseeded to grass, terraces, and trench silos.

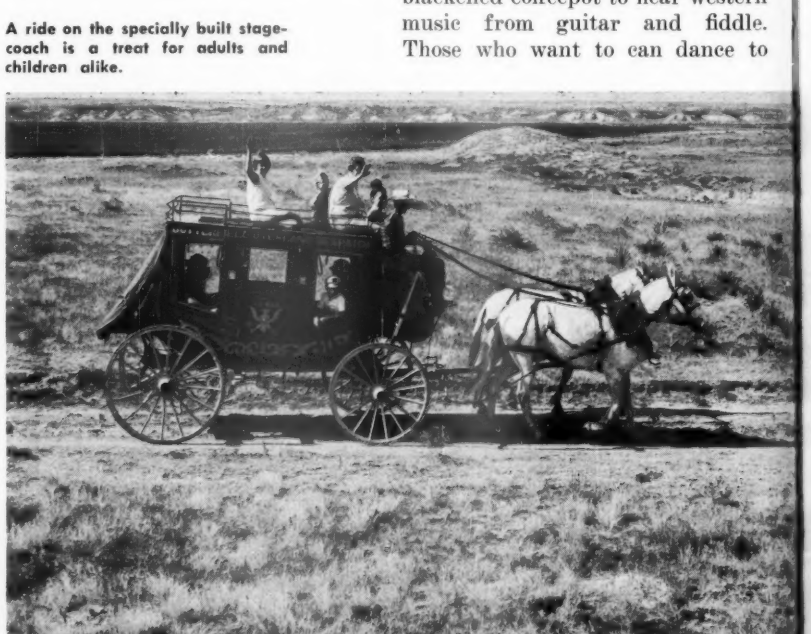
At day's end

After a day that passes all too soon, the wagon train forms a circle at the predetermined prairie campsite. Not far away, behind a grove of trees, is a ranch house that offers a chance for travelers to take a refreshing shower and wash the trail dust off their faces. They do not tarry long, however, because the campfires are lit, and the aroma of food soon fills the air.

Before the last rays of the sun disappear, all hands prepare their sleeping bags. The bags are furnished at the journey's start to make a more comfortable bed under the stars or upon native hay piled high in the wagons. The dark outline of the wagons against the dimly lit western horizon, the smell of campfire smoke, and the sound of whinnying horses truly bring the old West back to life.

At night, the modern pioneers gather around a campfire and blackened coffeepot to hear western music from guitar and fiddle. Those who want to can dance to

A ride on the specially built stagecoach is a treat for adults and children alike.



The wagon train makes a rest stop at the Smoky Hill River on the Norton farm to water the horses.

Wagons Ho guests search Little Castle Rock for stones and fossils.

their favorite western and polka tunes on the buffalo sod. Others listen to the wagonmaster spin tales of cowboys who camped nearby while driving huge longhorn herds to the northern railroads.

And then the mail

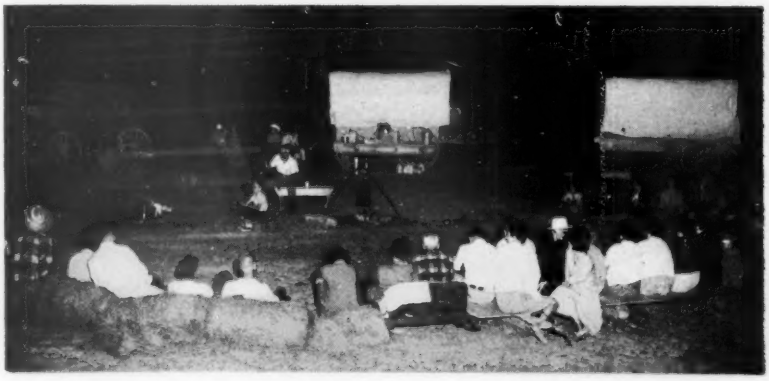
One of the trip's exciting moments comes when a Pony Express rider delivers to each traveler a letter from Wagons Ho. The letter is an invitation to attend a reunion each fall with other Wagons Ho guests. Tourists from the United States, South America, Germany, England, Ireland, and Sweden have already enjoyed Wagons Ho hospitality.

Harry Morris, an airline executive from Middlesex, England, wrote the Hefners, "Our time with Wagons Ho was the most exciting of our trip in the United States. You are to be commended for keeping the heritage of the West alive, for this part of America is known and loved the world over."

Wagons Ho has made 13 trips across Kansas prairie since its beginning 2 years ago. The Hefners so far have come out about even financially, but they expect to realize a small profit this year.

With satisfied guests urging their friends to travel wagon train, the old Butterfield Trail is once again taking more and more "pioneers" west. ♦

After putting the wagons in a circle and eating a hearty evening meal, guests try out the prairie-sod dance floor (above) and enjoy themselves around the evening campfire.



For profit and good land use . . .

Texan Turns to Growing Wildlife as His Only Ranch Crop

By James Henson and Vernon Hicks
Biologists, SCS, Bandera and Temple, Tex.

WILDLIFE harvest long has been an extra dividend from regular farming and ranching operations.

But many landowners in Texas now are shifting to wildlife as a major crop, increasing their income and improving their land in the process.

Charles Hutcheson of Bandera County, a cooperator with the Bandera Soil Conservation District, presents a good example of this land use change and its benefits.

A shift in plans

Hutcheson's story began in 1955, when he was carrying out typical ranching operations on his 633-acre ranch—raising cattle, sheep, and goats and about 65 acres of small grain. His wildlife harvest consisted of 6 to 8 deer and 7 to 10 turkeys a year. The chief returns from his ranching operation were hard work, low dividends, and range deterioration.

Since ranching was returning so little on the investment made, and demand for hunting leases was increasing rapidly, Hutcheson decided to make wildlife his chief crop. He believed this change would bring him more money and at the same time improve his land.

In 1955, he sold all his sheep and goats and all but a few head of cattle. Cropland was converted to wildlife food plots. Brush on the rangeland was cleared in patterns with care taken to leave adequate cover for the deer and turkey.

Indiangrass and little bluestem thrive on the cleared strips, providing succulent forage for wildlife.

The reduced load on his range permitted the grass, forbs, and desirable woody plants to improve, providing more food for both livestock and wildlife.

Deer and turkey began to increase, and soon Hutcheson had his new crop—wildlife—well established.

Strips in foreground and background have been cleared of brush to increase native grasses; remaining brush provides cover for wildlife.

They pay to harvest

Harvesting is not a problem. A group of businessmen from Louisiana has leased all hunting rights. This group returns to Hutcheson's ranch each fall and gladly pays to reap the harvest.

Two years ago Hutcheson sold the remaining cattle and now manages only wildlife—deer, turkey, and an introduced species, mouflon sheep.

Deer and turkey feeders, placed throughout the ranch, are kept full of feed all year. Hutcheson estimates that the wildlife eat about 10,000 pounds of maize and 15,000 pounds of shelled corn each year. Hunters pay the cost of feed

New hunting blind at the edge of a clearing on the Charles Hutcheson ranch makes hunting more comfortable.

and transportation and labor involved in putting it out, plus the expense of planting the wildlife food plots.

The hunters are well pleased with the hunting arrangement Hutcheson provides for them. In 1964, 38 hunters harvested 41 deer, all 6-point bucks or larger, and 20 tom turkeys. Last year approximately the same number of hunters got 73 bucks, 8 does, 20 tom turkeys, and 8 mouflon sheep.

Hutcheson is well pleased with the results of his land use change, too. "Income from the ranch has more than doubled since I sold my sheep, goats, and cattle and started managing strictly for wildlife," he said, "and this is taking into consideration the buying-power of the dollar today as compared to that of 11 years ago."

Soil Conservation Service technicians assisting Hutcheson say that his rangeland is now in good to excellent condition as compared to a very poor condition before the land use change. ♦

Sale of Firewood Improves Woods

SEVERAL YEARS ago fire ruined much of the timber in Lamar Hawk's 150 acres of woodland in Vinton County, Ohio. It was a serious blow, for the woodland had been producing good lumber and some pulpwood.

Not discouraged, Hawk found a market for his burned-over timber, now marginal by most standards. He cuts the timber and sells it for firewood. In this way he has developed a supplemental income from what many would consider a disaster. And he is improving his woodland by removing dead and damaged trees that stand in the way of new high-quality growth.

For the past 11 years, Hawk has been cutting his normally unwanted wood into sizes to suit his customers. Some want it for fireplaces, others for furnaces. He splits most of the wood for easy handling.

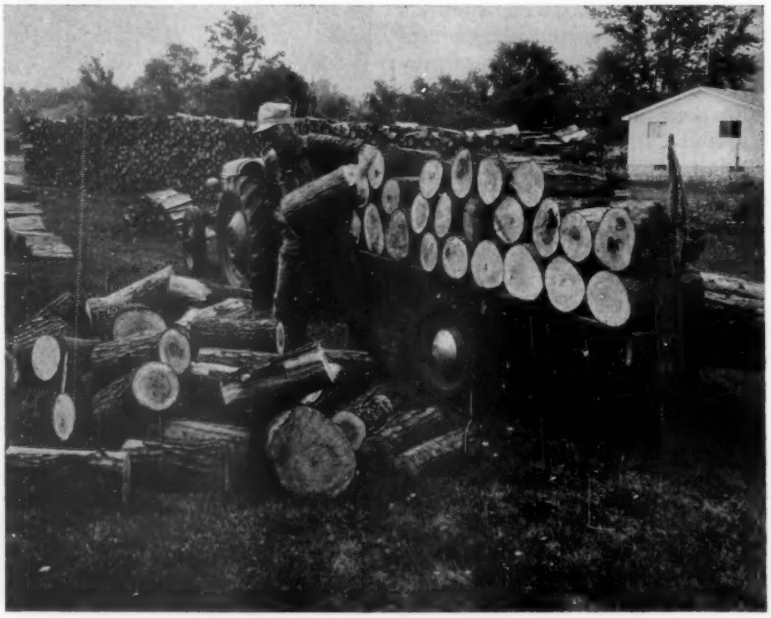
Hawk has a 230-acre farm and is a cooperator with the Vinton Soil and Water Conservation District. He farms some of his acreage, drives a school bus during the school year, and in his "spare" time, cuts and delivers the wood in his small farm truck. He uses a tractor and trailer to get the logs from his woodlands to the farm headquarters in the summertime.

"Most of the wood I market for fireplace use is white and red oak, along with hickory, because it gives out a good heat, is low-burning, and leaves a bed of hot coals," Hawk says.

Hawk spends 3 or 4 months each year during his slack season on his wood business. He sells 40 to 60 ricks annually to customers in Chillicothe, 22 miles west of his farm.

"I have no trouble getting customers," Hawk said. "Many of them have standing repeat orders. If I had more time, I could supply even more customers."—WALTER J. DUMECH, *Work Unit Conservationist, SCS, McArthur, Ohio.* ♦

Lamar Hawk unloads hardwood from his farm trailer to lot near his home as he harvests fire-damaged trees.



Roadside Beauty Is Byproduct of Watershed Project

By William C. Lowry
Soil Conservationist, SCS, Madison, Ky.

ROADSIDE beautification is a growing byproduct of the Line Creek Watershed Project in Monroe County, Ky. Conservation measures along roads there are turning scarred silt-producing roadbanks into grass-covered vistas.

Stabilizing roadside banks with fescue is not new in some sections of this southern Kentucky county, especially along State highways leading through Tompkinsville, the county seat. But the idea, heretofore, has not spread rapidly in remote rural areas.

Nine miles of roadbank stabilization was planned for the Monroe County portion of the Line Creek Watershed Project. The Monroe County Highway Department, the Fiscal Court, directors of the Line Creek Watershed Conservancy District, and the Soil Conservation Service joined forces to stabilize the critical areas.

Twenty-two landowners involved in the planned roadside project contributed their land, labor, and farm machinery. The sponsors provided heavy earthmoving equipment. Needed materials were purchased by the conservancy district with watershed protection funds.

Stabilizing the area consisted of sloping, fertilizing, seeding, and mulching the roadside banks, which varied in height from 4 to 17 feet. The banks were shaped to a minimum slope of 2½:1, fertilized at the rate of 1,500 pounds an acre of 10-10-10 fertilizer, and seeded to 35 pounds an acre of certified Kentucky 31 fescue seed.

The area, totaling 7 acres, was mulched with fescue straw at the rate of 2 tons an acre. It was

The eroding roadbank alongside a farm in the Line Creek watershed (above) was converted into a gentle grassed slope (c.) in a year's time. Multiflora rose (below) adds further beauty along a highway.

seeded in April 1964. Since that time, 5 additional miles of roadside slopes have been established to vegetation by other landowners in the area, according to SCS Work Unit Conservationist David R. Walden.

Reed Conkin, member of Monroe County Fiscal Court in the watershed area, said, "There is a world of difference in maintaining the roads since they have been sloped and stabilized. Work that had taken 5 days to do is now done in 3 days. We hope soon that all of our roads are fixed like these."

"We've had a goal here ever since our district was organized," said Roland Bushong, chairman of the district board of supervisors. "Our long-range program includes beautifying the view along all public roads in Monroe County, whether it be with grass or other vegetation."

The Monroe County Soil Conservation District was organized in 1945. It is estimated that more than 100 miles of roadside slopes have been vegetated through the cooperative efforts of the highway departments, landowners, and the soil conservation district.

Lankford Copass, chairman of the Line Creek Watershed Conservancy District, remarks, "The need for vegetative cover to control erosion and pride in the countryside have led us to improve the looks of our main roads for years; now we are beautifying our secondary county roads too." ♦

Great Plains Program to be Evaluated

USDA's Economic Research Service plans to study the effects of the 10-year-old Great Plains Conservation Program on the conservation of soil and moisture, on the people on farms and in the towns, and on living standards throughout the 10 Plains States.

This study by arrangement with the SCS will be conducted under the direction of W. B. Back, head of Resource Income Studies of the Resource Institutions Branch, ERS.

Field Supervisor Norman E. Landgren with headquarters in Fort Collins, Colo., plans to map areas of concentrated use of the program, and teams of interviewers will aid him in gathering information on the program's effects. The agricultural colleges in the Plains will also assist in this study.

Indian Corporation Signs Agreement

MENOMINEE COUNTY Soil and Water Conservation District, Wis., supervisors recently signed a single cooperative agreement that brought 93 percent of the land in Menominee County under agreement.

Menominee County is an area of 233,902 acres. Menominee Enterprises, Inc., owns 225,000 acres of this land.

Menominee Enterprises, Inc., is a private corporation formed at the time the Menominee Indian Reservation was terminated on May 1, 1961. The Indian people are the stockholders in the corporation which was founded to conduct their business affairs.

Leo Kohls (l.), chairman of the Menominee County District, and George Kenote, representing Menominee Enterprises, sign a conservation agreement covering the corporation's holdings.

More than 218,000 acres of the Menominee land is in commercial forest. It includes some of the largest white pine and hardwood timber in the Lake States area.

Under the district conservation agreement, the forest will continue to be managed on a sustained yield basis with guidance from the Wisconsin Conservation Department forester. The present allowable cut is 30 million board feet a year.

SCS will provide technical assistance to the corporation in developing the recreation resources of the property, which includes 300 miles of trout streams and many unspoiled lakes.

Jerry Grignon, chairman of the board of directors, says, "We need to develop and use our water resources to improve our economy. Careful planning is essential to protection of these resources." ♦

Rural Districts Theme of Meeting

Rural development districts and the demonstration cities program are among topics featured in the County Regional Problems Congress, 31st annual conference of the National Association of Counties, in New Orleans, La., July 17 to 20.

Keynote speaker is Marion Folsom, former Secretary of Health, Education, and Welfare. Other speakers include Louisiana Governor John McKeithen, New Orleans Mayor Victor Schiro, Office of Economic Opportunity Director Sargent Shriver, and Undersecretary Robert Wood of the new Department of Housing and Urban Development.

Elected and appointed county officials from across the country will attend and participate in discussions on the regional aspects of almost every county activity. The war on poverty, mass transit, and medical care for the aged also have featured places on the program. ♦

"Beauty" Series Prints for Sale

(Photo on p. 288)

THE POPULAR "America the Beautiful" photo series now can be purchased—$5 for the whole set of 52 or individual pictures at $0.10 apiece.

Several years ago the Soil Conservation Service assembled a series of striking natural-color photographs that show the great natural and manmade beauty of America's conservation-treated rural lands.

The series of large prints, one from each State, Puerto Rico, and the Virgin Islands, has been displayed throughout the Nation at fairs and other public events; in banks and businesses; and in the lobby at Dulles International Airport near the Nation's Capital. Individual prints grace the walls of several offices in SCS' national office and elsewhere.

As demands for copies of the relatively expensive photographs increased, SCS made arrangements with the U. S. Government Printing Office to make lithographic prints of the series that could be bought at low cost.

All 52 photographs now have been reproduced and are available from the Superintendent of Documents, Washington, D. C. 20401. The pictures, in full color, measure 15 by 20 inches, printed on 20- by 24-inch paper. They are suitable for framing and hanging in homes, schools, offices, and business establishments. Order blanks can be obtained in local SCS offices and in many post offices. ♦

Soil Colors for Carpets

To incorporate the color of soil in their carpet patterns, manufacturers of carpets have asked SCS for help in determining the general soil colors in different geographic regions of the United States. This information is now in SCS soil survey reports. ♦

Simon Britt (r.) consults with SCS Work Unit Conservationist Albert Boyd about his farm pond under construction in the background.

Cooperator Builds Multipurpose Pond

A multipurpose pond on the farm of Simon Britt, a Negro cooperator in the Chipola Soil Conservation District, Fla., will provide water for his livestock and recreation for his family and neighbors.

Mr. Britt has been a district cooperator since 1941. He serves on the Jackson County Rural Area Development Board.

He operates a 192-acre general farm of his own, farms another 120 acres belonging to his sister, and helps a brother who lives several miles across the county. ♦

SCS Enters Work-Study Program

THE NATIONAL headquarters of the Soil Conservation Service is using students of Howard University, Washington, D.C., in a work-study project under the Economic Opportunity Act.

Part-time on-the-job experience will be provided for 10 students in civil engineering, geography, mathematics, business administration, drafting, biology, and cartography, under an agreement signed with the university. SCS is the first agency in USDA to undertake such a program.

The first participant, James McWilliams, entered on duty April 25, in the Washington office helping to examine vouchers submitted for payment. Others will work in Washington and at Hyattsville, Md. ♦

Dean Carl F. Anderson, of Howard University signs the memorandum of agreement establishing the work-study project with the Soil Conservation Service. Mrs. Goldie W. Claiborne, director of the financial aid office at the university, approves the action as SCS Administrator D. A. Williams (l.) and special assistant James F. Hughes look on.

Pan American Soil Congress Names Permanent Commission for Future

LOOKING toward the holding of a second Pan American Soil Conservation Congress, delegates to the First Congress in Sao Paulo, Brazil, elected a 5-man commission "to foster and coordinate soil conservation activities in the Western Hemisphere after the termination of the present Congress."

Nearly 500 conservationists from countries throughout the Western Hemisphere attended the 18-day meeting April 12 to 29. About 150 technical and general papers were presented and will be published in the proceedings.

Secretary of Agriculture Orville L. Freeman officially opened the formal program on April 16. SCS Administrator D. A. Williams headed the official United States delegation and opened the plenary sessions the following Monday.

The congress was sponsored by the Government of Brazil and the State of Sao Paulo. Joao Abramides Neto of the Sao Paulo Ministry of Agriculture was general coordinator. Roy D. Hockensmith, chief of soil survey operations, SCS, assisted with the arrangements.

Four days of field tours were held prior to the official opening. Visits were made to coffee and sugarcane plantations and to other agricultural and urban developments in the State of Sao Paulo.

Mrs. Hugh Hammond Bennett, wife of the first chief of the Soil Conservation Service, accompanied delegates on the tours and was given special recognition in honor of Dr. Bennett's work in Brazil.

Members of the permanent commission are: Jose Betroni, Institute of Agronomy, Campinas, Sao Paulo, Brazil; Gladstone W. Morgan, University of the West Indies, Kingston, Jamaica; H. Wayne Pritchard, executive secretary, Soil Conservation Society of America, Ankeny, Iowa; Julio Ipucha Aguerre, Institute of Soil and Technical Agriculture, Buenos Aires, Argentina; Manual Paulet Iturri, Agrarian University, La Molina, Lima, Peru.

Bertoni was elected president of the commission; Pritchard was named secretary.

Mrs. Hugh H. Bennett with Roy D. Hockensmith, SCS, during the flag-raising ceremony at the Fazenda Jussara (farm) near Rio Clara, Sao Paulo, Brazil.

Technicians from two continents engage in intense conversation. They are Haroldo Monteiro da Silva (l.), engineer-agronomist with the Soil Conservation Service of Sao Paulo, and LaVerne Anderson, work unit conservationist, SCS, Howell, Mich.

The commission's charge

The commission was charged to:

"1. Transmit recommendations of this congress concerning future soil conservation activities to the appropriate international agencies, country governments, and non-governmental institutions.

"2. Receive and assess the responses of the above-mentioned bodies.

"3. Promote action by country governments to bring about an agreed upon program of soil conservation activities.

"4. Obtain the agreement of country governments concerning the appropriate administrative agreements.

"5. Make arrangements for future congresses, workshops, etc., as agreed between country governments."—H. WAYNE PRITCHARD, *Executive Secretary, Soil Conservation Society of America, Ankeny, Iowa.* ♦

CONSERVATION PROFILE

W. P. Cater

New Mexico

Rancher-statesman sparks strong resource efforts

THE LIFE and accomplishments of W. P. "Bill" Cater of Questa, N. Mex., are proof that inspired local leaders can change the economy of an area and improve the lives of people through soil and water conservation.

As a longtime rancher, soil and water conservation district supervisor, State districts association president, and State senator, he has been in the forefront in bringing steady resource and community improvement in New Mexico through many changes in needs and opportunities.

Cater is an oldtimer in Taos County ranching. He came there about 40 years ago. The Cater ranch lies at an elevation of 6,500 to 8,000 feet, near the New Mexico-Colorado State line, where rainfall averages 12 to 16 inches a year and the growing season is short. He and his brother depend on cattle, hogs, grain, and hay from their 7,500 acres of rangeland and 500 acres of irrigated pasture for the family's income.

Battle with brush

During Cater's early years on the ranch, he observed that only 10 to 50 percent of the forage potential was being realized from the native rangelands of the Taos country. Formerly good grassland was covered with sagebrush and nonpalatable shrubs. Forage yields were as low as 40 pounds of native grass an acre in a normal year.

Cater tried controlling the brush and reseeding with crested wheatgrass on his ranch and raised grass yields to as much as 1,500 pounds an acre. This successful experience led him to establish 20 acres of crested wheatgrass for seed-increase in the fall of 1943.

It was the beginning of a new era in the ranching business of his section of the State. Since that time, more than 75,000 acres of sagebrush land has been cleared and much of it seeded to crested wheatgrass.

Cater was elected to the Taos District board of supervisors in 1947 and has been a supervisor ever since. He served as chairman of that board in 1954 through 1962 and again in 1965. The Taos District was named the outstanding district in New Mexico in 1956.

During Cater's service as district supervisor and State senator, he became deeply concerned with the economic well-being of New Mexico's people, who depend in large measure on the use of natural resources for a livelihood. Farming and stock raising have always been of major economic importance to the people of New Mexico.

Economic development

What concerned Cater and other farsighted resource leaders was the poverty of many northern New Mexico families who are depending on too-small farm units with undependable supplies of irrigation water; growing crops according to traditional rather than scientific methods; and grazing depleted rangelands with poor-quality cattle. Misuse and underutilization of resources were reflected in poor schools, poor roads, poor nutrition, and an apathetic people.

Clearly, there was great need for stepped-up economic development of a broad area of northern New Mexico. But where to start?

The enabling act for Resource Conservation and Development Projects, enacted in 1962, provided the vehicle for State and local leaders to pool their efforts with agencies of the Federal Government, under leadership of the Soil Conservation Service, for resource improvement and economic rehabilitation of large areas.

Cater was the real "spark plug" in getting 24 sponsors—including conservation districts, county governing bodies, cities, villages and towns, State governmental agencies, and private organizations—to work together in the 2.8 million-acre Northern Rio Grande RC&D Project.

The success of a project rests on results. Since its initiation in 1964, loans for agricultural development have more than doubled. Improvements completed on community ditch systems benefit about 900 farmers. Work done on projects to date has provided 36,500 man-days of employment. Dollar income has increased by $398,000.

Cropping systems are changing, and new marketing facilities have been built. A new wood processing plant has been constructed. Of the 33 group conservation jobs in the State during 1965, 26 were in the RC&D project area.

Although Cater's early interests

Bill Cater (l.) shows some of his crested wheatgrass pasture to SCS State Conservationist Einar L. Roget.

centered in the northern New Mexico district he called home, his influence soon spread across county and district boundaries and throughout the State. He was elected vice president of the New Mexico Association of Soil and Water Conservation Districts in 1952 and served as vice president from 1953 until 1962. In 1962 he was elected president and has held the office since that time.

Bill was elected chairman of the New Mexico State Soil Conservation Committee in July 1965.

Conservation leaders, with Bill Cater in the front, have generated strong support from the State legislature in securing a broader legislative mandate to meet growing resource conservation needs. In 1965 the State legislature revised the districts law and gave broader representation to all segments of the population, urban as well as rural. The legislature appropriated $80,000 of State funds for watershed planning by SCS. The rate of watershed planning under Public Law 566 has nearly doubled as a result of financial participation by the State.

The unselfishness of Cater's public service is underscored by the fact that most of the posts of community and statewide service that he holds pay no salary. He has paid much of his travel expense from his own pocket.

Bill Cater is a dedicated rancher-conservationist who is concerned about the well-being of his fellow man and who is doing something about it. ♦

Sagebrush Control

In the past 30 years sagebrush has been controlled successfully on 5 to 6 million acres. More than half this acreage has been treated during the past 5 years. It is evident that the practice is gaining momentum and will be applied to many more millions of acres in the West. ♦

Governor's Tour Sees Progress in Conservation

THREE Minnesota governors have toured many hundred miles of country roads the past decade to view soil and water conservation problems and progress in the State.

They have done so through the Governor's Conservation Tour cosponsored by the State Association of Soil and Water Conservation Districts and the State Soil Conservation Committee.

The tour has been helpful in many ways. Frank Crippen, State committee chairman last year, says it helps promote sound conservation legislation because the governor and other high State officials learn the principles of soil and water conservation.

It also gives the governor an opportunity to talk with the land owners and operators who apply conservation practices. Thus he sees firsthand how Federal and State agencies work with local soil and water conservation districts.

The governor also makes speeches and dedications along the way which helps the districts gain recognition for their resource planning and development work.

The first tour was held in 1956 during Orville L. Freeman's governorship. Since then, Governors Elmer L. Andersen and Karl F. Rolvaag have also toured conservation practices across the State. Governor Rolvaag has become so interested during his 3 years as governor that he has asked for a tour each year.

Many persons participate in the tours besides the governor. In addition to members of the State Soil Conservation Committee and representatives of the State Association of SWCD's the tour last October 19-21 also included the State Commissioner of Agriculture, the Commissioner of Conservation, district supervisors, the State Conservationist, Extension Service representatives, State and county ASCS committeemen, plus local legislators and mayors. ♦

Youth Conference on Conservation

SOME 500 delegates from 10 youth organizations throughout the country participated in a Youth Conference on Natural Beauty and Conservation in Washington, D. C., June 26 to 29.

George Fox, FFA member from West Lafayette, Ind., was chairman, and Jacqueline Sharp, a Girl Scout from Jackson, Miss., was cochairman.

The conference was a followup on the 1965 White House Conference on Natural Beauty in an effort to involve youth groups in conservation needs and planning.

In accepting a Girl Scout offer to sponsor the meeting, Mrs. Lyndon B. Johnson said, "This is one of the most exciting ideas, of great potential, that has come my way."

Besides the FFA and Girl Scouts, the youth organizations represented were the Boy Scouts, Camp Fire Girls, Boys' Clubs of America, YMCA, and YWCA, 4-H Clubs, Future Homemakers of America, Girl Clubs of America.

Serving as coordinator was Miss Elizabeth Mason, formerly director of women's activities for the U. S. Forest Service.

The conference program included talks by leading conservationists, group discussions, and panels on such conservation problems as water resources and waterfronts, antilitter problems, "how-to-do-it" guidelines, conservation education in natural resource problems, roadside improvement and highway building problems, city beautification, air pollution, and open space problems. ♦

Water. By Luna B. Leopold, Kenneth S. Davis, and the Editors of Life. *1966. Time, Inc., New York. Life Science Library. 200 pp., illus. $3.95. School and library distribution by Silver Burdett Company, Morristown, N J.*

In the familiar format of the *Life* "Libraries," this handsome book makes a complex subject understandable to the general reader and to school students by a happy combination of simple text and expressive photographs and drawings.

Professional hydrologists and conservationists, however knowing of the statistics and problems of water supply and management, will find interest in the basic explanations of familiar facts in the chapters on the physical properties of water, the hydrologic cycle, ground water, erosion, and biological function. Problems of water use and conservation are summarized with equal effect.

Life's Editors have thoroughly canvassed the Nation's authorities on the subject to gather and verify the contents of the book. A half page of acknowledgments lists upwards of 50 individuals representing government agencies (including SCS), universities, and private institutions concerned with water.

The authors, chief hydrologist of the U. S. Geological Survey and a prominent author, both worked early in their professional careers for the Soil Conservation Service in the Southwest, where water scarcity is an ever-present fact of life. Abel Wolman of Johns Hopkins University, another well-known water authority, provides the introduction.

The book, like others in the series, is available to individuals only on direct order from the publisher.—B.O.

Consumers All: The Official Consumer's Guide. By the U. S. Department of Agriculture. *1965. Pocket Books, Inc., New York. 496 pp., illus.; paper. $1.50.*

The widespread appeal of the consumer information in the 1965 *Yearbook of Agriculture* has led to its being reprinted in its entirety by a commercial publisher. Except for its title page and cover, the book is an exact reproduction, slightly reduced in size, of the original.

New Publications

The Population Challenge. *1966. U. S. Department of the Interior Yearbook No. 2. 80 pp., illus. $1.25.* This combination annual report and conservation lecture continues the large format and lavish use of color illustrations ("made possible through the loan of color separations of previously printed pictures") introduced by the Department of the Interior in its 1965 yearbook, *Quest for Quality.*

The programs and some of the activities of the Department's various agencies and offices are described in relation to the growing pressure of population on resources.

The argument is strongly reminiscent of the Department of Agriculture's "fifth plate" theme of 25 years ago. But, says the report, "The difficulties we face are not so much scientific and technological. Rather, they have largely to do with social philosophy and the will to organize for the general welfare. A wider and deeper dialog on social purposes is necessary to break the moral, political, and economic bottlenecks to a better life for everyone. It is this Department's responsibility to contribute to this dialog with reports to the people on its efforts to improve the outdoor environment, to protect our wildlife, to help eliminate litter and junk from the American landscape, to better manage our water, to stretch our fuels and minerals, and generally to maintain and strengthen our country's resource base."

Wild Ducks on Farmland in the South. By William W. Neely and Verne E. Davison. *1966. USDA Farmers' Bul. 2218. 16 pp., illus. $0.10.* Superseding Farmers' Bulletin 2144, "Managing Farm Fields, Wetlands, and Waters for Wild Ducks in the South," this bulletin presents suggestions on establishing and managing duck fields; selecting and planting duck food, with a table evaluating some duck-food plants; building ponds, utilizing reservoirs, brackish-water areas, and marshlands; and hunting.

Farm and Ranch Vacation Guide. Edited by Patrica Dickerman. *1966. Farm Vacations and Holidays, Inc., New York. 96 pp., illus. $1.50.* Mainly a listing of facilities and rates of farms and ranches offering "vacation" services. These facts, as well as the suggestions to vacationers and testimonials of clients included in the book, should be helpful to operators considering a venture in the farm vacation business.

Rural Areas Development at Work. *1966. USDA PA 625. 32 pp., illus.* Gives concrete examples from all over the country showing how Rural Areas Development program helps rural people use Federal and State programs to create new jobs and develop needed facilities.

Restoring the Quality of Our Environment. By the Environmental Pollution Panel, President's Science Advisory Committee. *1965. The White House. 317 pp. $1.25.* This report, the subject of the lead article in *Soil Conservation* for April, is now available from the Superintendent of Documents.

Protecting the Forests From Fire. *1965. USDA Agr. Inf. Bul. 130, rev. 30 pp., illus.* Hints on fire control and firefighting methods and a list of historic forest fires.

Conservation Highlights, 1965. *1966. USDA 2-fold folder.* Digest of the progress report of the Soil Conservation Service.

Soil Surveys

Alameda Area, California. By Lawrence E. Welch, Richard C. Huff, Richard A. Dierking, Terry D. Cook, Leland A. Bates, and Wells F. Andrews. *95 pp., illus.; maps 3.17 inches to the mile (1:20,000).*

Gaines County, Texas. By William H. Dittemore, Jr., Carey May, Willis L. DeLozier, Donald L. McClennon, and Harold W. Hyde. *1965. 55 pp., illus., maps 3.17 inches to the mile (1:20,000).*

Fayette County, Alabama. By James A. Cotton, R. B. McNutt, G. L. Hickman, and K. E. Fussell. *1965. 117 pp., illus.; maps 4 inches to the mile (1:15,840).*

From the Administrator:

The World Is Our Horizon

IN THESE changing times, the soil conservationist is more important than ever before in helping plan for wise and balanced use of our land resources.

The individual conservationist and the individual landowner form a team that shapes critical decisions about each individual piece of property. For good or for bad, the sum of their actions is the Nation's true performance in conservation.

To an increasing degree, the individual's actions on his own piece of land are affected by—and in turn affect—the national and the world demand for food products of the land.

The Soil Conservation Service provides a chain of communication between the individual and the world community. In the changing days ahead, that link can prove invaluable in achieving balanced shifts in land use without endangering basic resources.

FOOD IS a matter of growing concern in the world today. Our view, as individuals and as a Nation, of the situation is changing more rapidly than we realize. As we become involved, through international aid arrangements, in the problems of other nations, we see as never before the very threat of famine in many parts of the world.

A few months ago we were preoccupied with the burden of "surpluses" of farm commodities. We were aware that people in other nations suffered for want of these same commodities. We were aware, too, that the need was increasing as population multiplied everywhere. But we could not see how our own market could be freed soon of depressing oversupplies.

The outlook is changing already. Acreage reductions have begun to be effective. Food for Peace efforts have found ways to move increasing volumes of grain and foodstuffs to areas of want. The carryover of wheat has been reduced to a reasonable reserve, and the Secretary of Agriculture has announced an increase in the wheat acreage allotment for 1967.

In announcing the increase, the Secretary noted that it was "the beginning of a new era in American agriculture."

It is new not only in bringing a change in the direction of our production efforts, but, more importantly, in that we are prepared to make it a *controlled* change.

In this new era of American agriculture, as the Secretary said, we will be able to gear production not only to the needs of our own people and to those who can pay dollars for our products—but also to the needs of those struggling to develop their own economies.

The 15 percent increase in acreage allotment is a considered judgment of the additional wheat needed to meet domestic and foreign needs in an orderly fashion. The translation of this national estimate into actual changes in land use on individual farms is the responsibility of the individual owners and operators.

The choice of *which* acres, in each case, are to be shifted from other crops—or even from other land uses—to wheat is critical. Will some of our perennial grassland, established with such care in the past decade, be returned to cultivation? Will additional acres of native grassland be put to the plow? Will we sacrifice a part of the new wildlife habitat and recreation areas that have been so enthusiastically welcomed by urban users?

In these days of land use adjustment, the soil conservationist is needed on the planning team for every farm. Conservation districts and the SCS have a responsibility to see that every decision is made with full knowledge of capabilities and the comparative values of other possible land uses.

SELF-HELP by each nation is the key to victory over hunger. Increasing production in the United States can help, but it cannot make up for all the shortages in other countries. Neither can it hope to keep pace with the staggering growth of world population.

Soil conservation as a basis for efficient farming must become a way of agriculture in every country that hopes to meet the needs of its people for decent nutrition.

This truth was recognized in the recent Pan American Soil Conservation Congress in Brazil, in which conservationists from the United States exchanged ideas and experiences with leaders from other Western nations.

Such meetings do much to prepare the way for widespread adoption of practical conservation measures in all lands. More important, I believe, than the information exchanged in the formal papers is the establishment of personal relations between conservationists in different nations.

Such relationships extend the lines of communication from the hundreds of individual conservationists in constant contact with landowners in this country to their counterparts throughout the world. They are reinforced by the presence of SCS people working on international aid projects abroad and by visits of professionals and students to this country.

As our horizons broaden to encompass the world community, each of us becomes a wiser consultant to landowners making day-to-day land use decisions.

D. A. WILLIAMS

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The Beauty of Rural America

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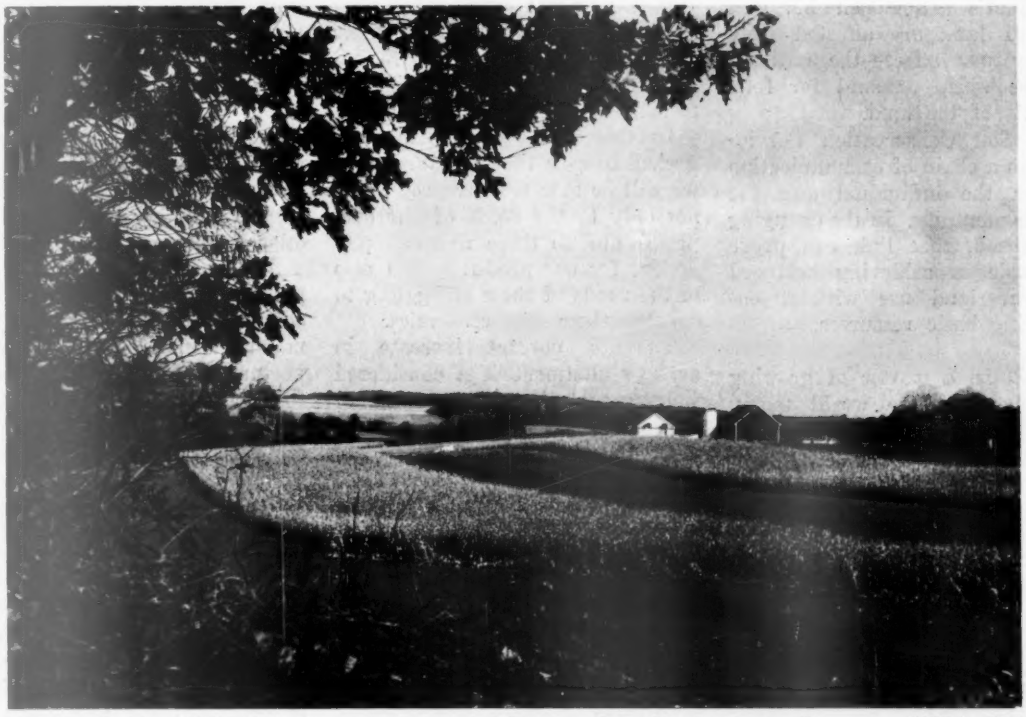

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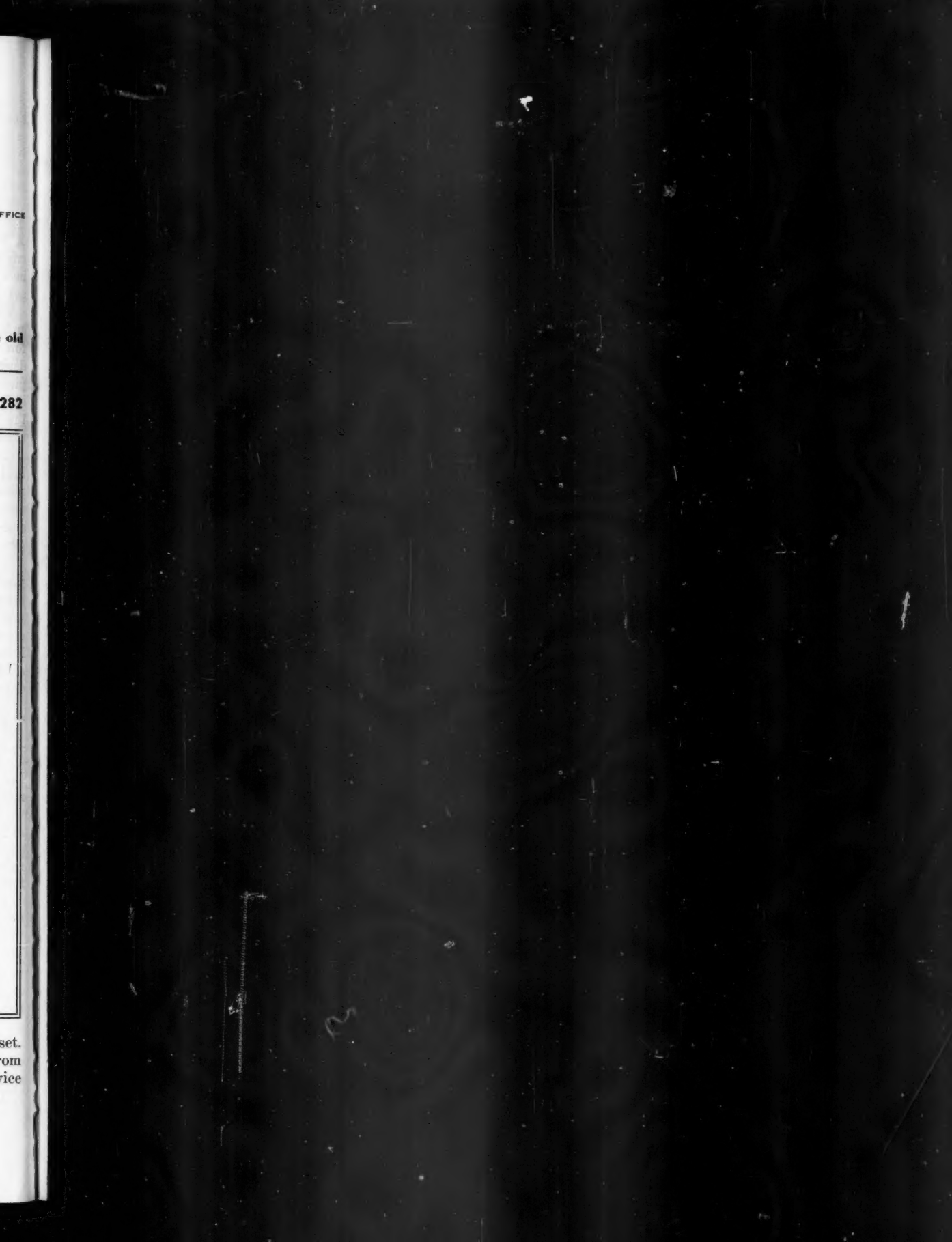
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